



# **CODATA AND WDS IN THE GLOBAL RESEARCH DATA LANDSCAPE**

**Kari Raivio**  
**Chancellor (emeritus)**  
**University of Helsinki**

CSC seminaari 4.6.2013

# INTERNATIONAL COUNCIL FOR SCIENCE (ICSU)

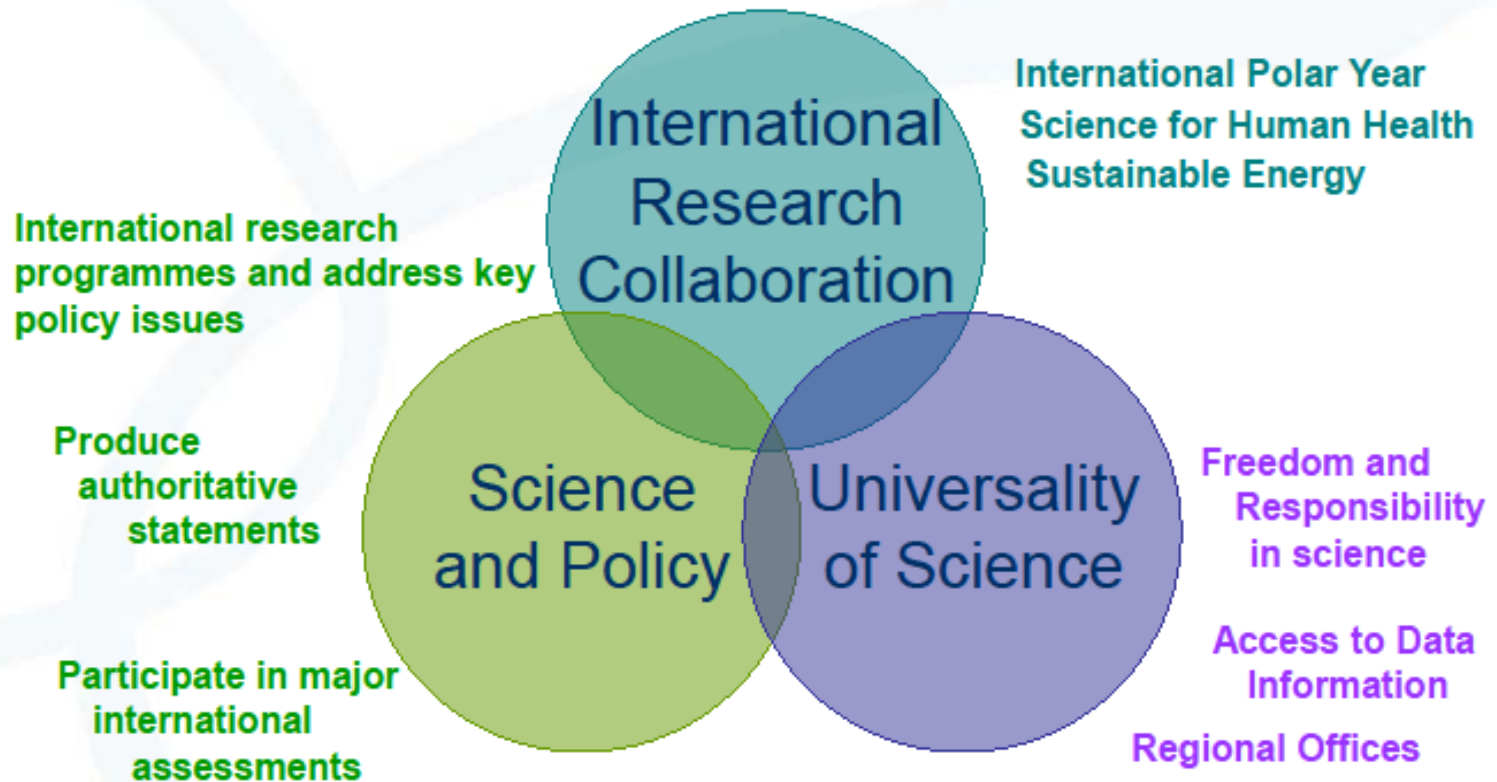
- Founded in 1931 (scientific unions)
- 121 National members
- 31 Union members
- Motto: "Strengthening international science for the benefit of society"
- Headquarters in Paris, 3 regional offices in developing areas
- Annual budget ca. 4 m€
- Three main types of activity
  - International research collaboration
  - Science and policy
  - Universality of science



# Strategic themes



Three inter-related themes:



# ICSU - UNIVERSALITY OF SCIENCE

- ICSU VISION ... a world where science is used for the benefit of all, excellence in science is valued and scientific knowledge is effectively linked to policy making. In such a world, **universal and equitable access to high quality scientific data and information is a reality ...**
- ICSU GOAL ... to facilitate a **new, coordinated global approach to scientific data and information that ensures equitable access to quality data and information for research, education and informed decision-making.**



# THE MAIN ICSU PLAYERS IN DATA

Committee on Data for Science and Technology (CODATA)

World Data System (WDS)

International Network for the Availability of Scientific Publications (INASP)

International Council for Scientific and Technical Information (ICSTI)

Interdisciplinary Programmes and Observing Systems

International Union Members

# HISTORY OF ICSU INVOLVEMENT

- Federation of Data Services (FAGS 1956-2009)
- World Data Centres (WDC, 1958-2009 )
- **Committee on Data for S&T (CODATA, 1966- )**
- Availability of Scientific Publications (INASP, 1992- )
- **Priority Area Assessment (2004)**
- **Strategic Committee on Info. and Data (SCID, 2008)**
- World Data System (WDS, 2009- )
- Global Observing systems (1992-) and GEOSS (2007-)
- **Review of CODATA 2012-13**



# CODATA MODUS OPERANDI

- Bottom-up: Task Groups
  - Application and evaluation every 2 years
  - GA approves
  - Connection with strategy unsatisfactory
- Top down: Strategic initiatives and actions
  - Partnerships (OECD, GEOSS, WSIS etc)
  - ICSUs research programs (Future Earth, IRDR etc)
  - Seminars, workshops
  - Biannual Conference
  - Data Science Journal



# STRATEGIC PLAN, 2013-18

## Tentative Elements

### *1. Policy and Institutional Frameworks for Data*

- Access to and Universality of data (CFRS, GEO, etc.)
- Agenda for data
- Digital divide

### *2. Frontiers in Data Science and Technology*

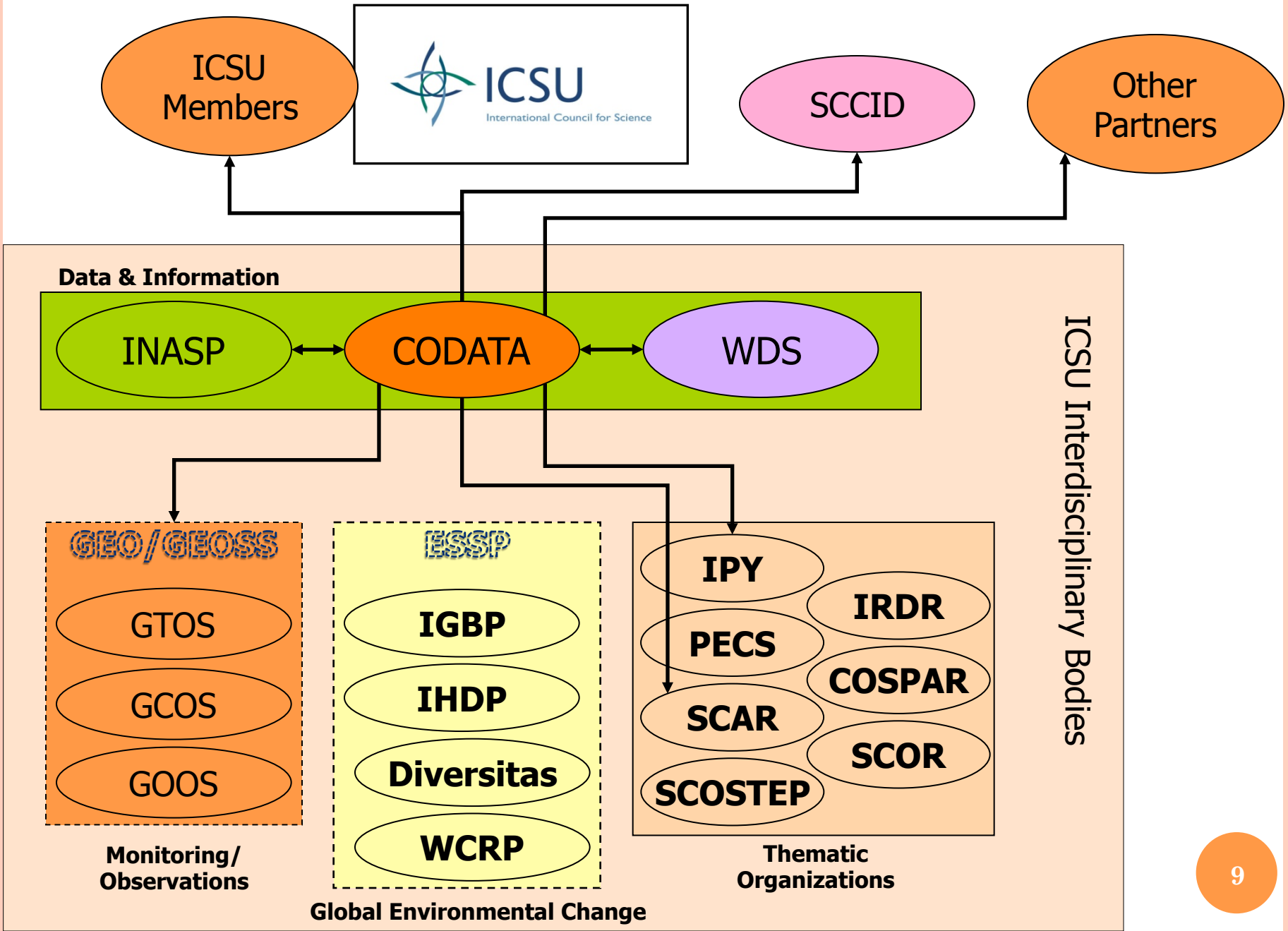
- Future development of world science & technology
- Frontiers in data management and stewardship, e.g., data citation, standards
- Key innovation areas, e.g., disaster risk, biodiversity, nanomaterials

### *3. Data Strategies for International Science*

- Open data and data-intensive science for Future Earth
- IRDR and other ICSU initiatives
- Partnerships with industry, others





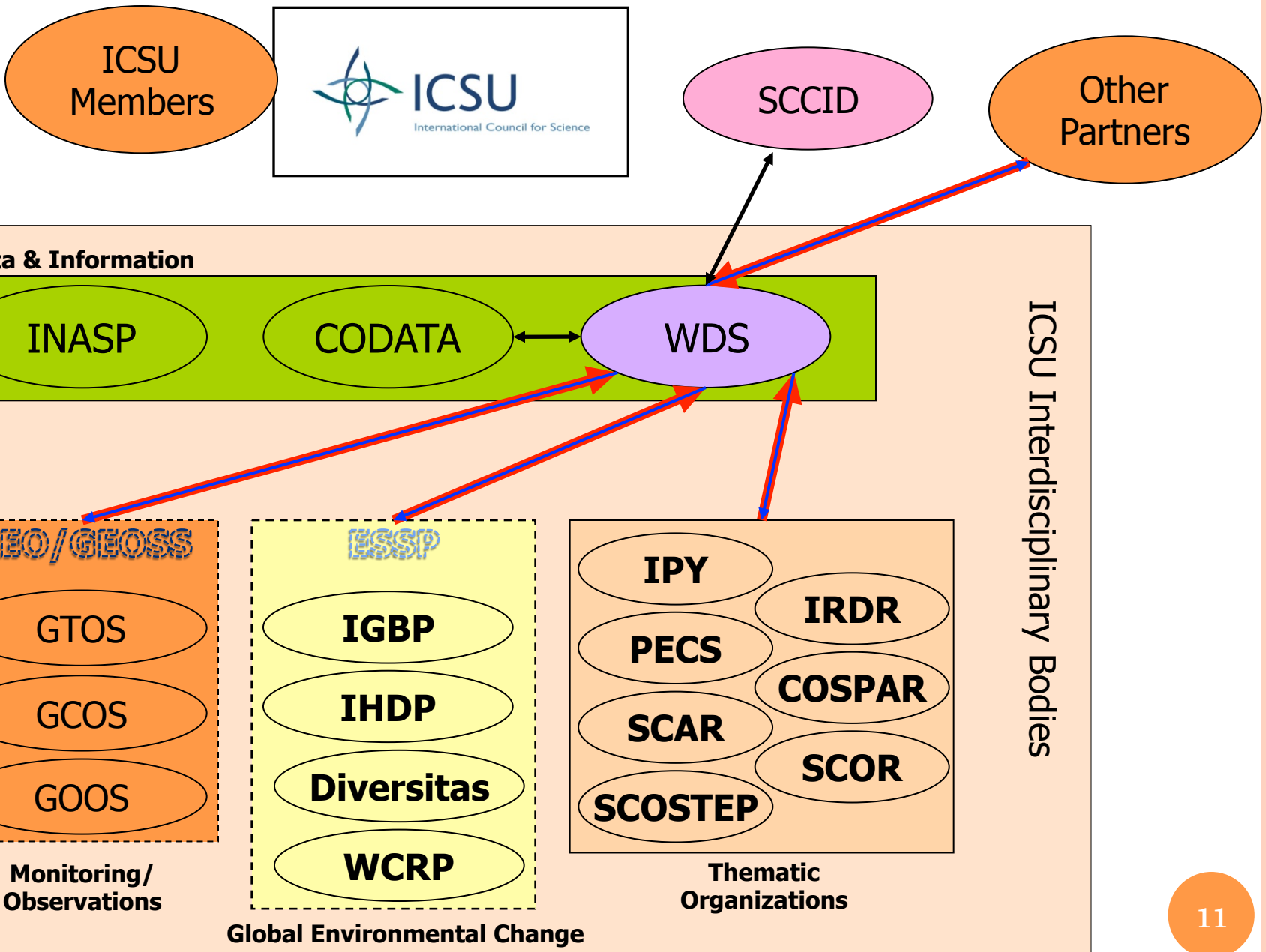


SCCID 3 - ICSU family structure and terminology: Elements and interactions.

# WORLD DATA SYSTEM (WDS)

- Roots in 1957 (IGY)
- 50 World Data Centers ja 12 astronomy/geophysics -centers
- Fusion in 2008 = WDS
- Scientific Committee/IPO (Tokyo)
- Biannual Conferences
- Data Center criteria, evaluation and accreditation for membership
  - 47 regular members
  - 7 networks
- Research Data Alliance (RDA) collaboration
  - Interest group on data publishing
  - Data repository certification





SCCID 3 - ICSU family structure and terminology: Elements and interactions.

# RECOMMENDATIONS OF CODATA REVIEW PANEL

- "Visioning exercise"/mapping of field
- CODATA & WDS joint Strategic Planning Committee
- Joint and more broadly based (Bi)annual Conferences
- Some Task Groups permanent (Fundamental constants, Data quality and access)
- Data Science Journal to commercial OA publisher
- Young investigators to join activities
- National D&I Committees for CODATA&WDS
- Collaboration with funders/private sector
- Recommendation to ICSU: fuse CODATA and WDS

